

AbstractMethods and Apparatus for Forming a Film on a Substrate

This invention relates semiconductor devices incorporating an intermediate etch stop layer between two dielectric layers in which the dielectric constant of each of the layers is $k \leq 3.5$ and the etch stop layer has a selectivity of at least 2.5:1 relative to the upper layer. Methods and apparatus for forming nitrogen doped silicon carbide films, for example, for use as etch stop layers are described.

Figure 5.